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DEVELOP NEW METHODS OF PRODUCING  
BOLTS, MACHINE TOOL PARTS, DIES

BEGIN SERIES PRODUCTION OF COLD UPSETTING AUTOMATICS -- Moscow, Moskovskaya Pravda, 20 Jun 51

The Serpukhov Machine-Tool Building Plant imeni 8 let Oktyabrya, which produces press and forging equipment, has started series production of cold upsetting automatics for bolt production.

The plant has completed the year plan for the production of A-713 nail-making automatics, and has produced two machines above plan. It is now producing A-715 automatics planned for the third quarter.

FORMING REPLACES TURNING IN BOLT MANUFACTURE -- Leningradskaya Pravda, 28 Jul 51

Until recently, so-called finished bolts were produced on lathes at the (Leningrad) Plant imeni Molotov. This is an extremely laborious operation and wastes a great deal of valuable metal.

A new technology has now been developed whereby the bolts are formed on presses.

In mechanical properties, accuracy of the process, and external appearance, bolts produced by this method are not inferior to those turned on lathes. In addition, in the new technology the amount of scrap metal has been decreased three times, labor consumption has been cut to one fourth, and the production cost has been lowered considerably.

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MACHINE MOLD 60 PERCENT OF ALL MACHINE-TOOL PARTS -- Yerevan, Kommunist,  
 3 Jun 51

Machine molding was introduced at the Yerevan Machine-Tool Building Plant imeni Dzerzhinskiy in 1950. At present, 60 percent of all machine-tool parts are machine molded. Whereas a worker could formerly mold 23-30 pairs of flasks in 8 hours, he can now produce 60-80 pairs by machine in the same time.

COMPLETELY MECHANIZE HEAT-TREATMENT PROCESS -- Moscow, Moskovskaya Pravda,  
 9 Jun 51

The Moscow Frezer Plant imeni M. I. Kalinin has developed and put into operation an aggregate for bright hardening of threading dies. In appearance it reminds one of an automatic conveyer line frequently drawn by artists to illustrate the plans of the future. A row of baths and electric and gas furnaces lines the floor of the heat-treatment shop. Above them is an 11-meter metal box. This contains smoothly moving conveyer chains carrying holders on which threading dies have been placed. Special hooks with which the transfer chains are equipped lift the treelike holders and carefully transfer them from one bath to the next, lower them into the furnace flame, and after a predetermined period of time, lift the red-hot threading dies and move them on.

For the first time in the tool industry, heat treatment of metal-cutting tools has been converted to conveyer methods.

The new method has eliminated a multitude of shortcomings and, in addition, has completely mechanized the process.

A great deal of credit is due D. A. Loktev and A. I. Smirnov for the design and construction of this new aggregate.

Productivity in heat treatment of threading dies has increased nine to ten times, and the quality of the dies has improved considerably. The surface of the part is clean, bright, and without any traces of cinders. Chemical cleaning has become unnecessary.

The heat-treatment shop is now conducting experiments on the use of this aggregate for bright hardening of reamers as well as of dies.

DEVELOP, MANUFACTURE NEW THREAD-ROLLING MACHINE -- Moscow, Vestnik Mashinostroyeniya, Jul 51

The production of threads by rolling is not a new method; however, plants have been able to produce only metric threads with a pitch of up to 3 millimeters and length of up to 60 millimeters by this method.

To develop this field further, the Central Design Bureau of the Main Administration of Industrial Accessories (Glavarmalit) of the Ministry of Machine and Instrument Building has designed and manufactured a machine tool, Model RNSh-2, for rolling coarse threads.

This machine is designed for rolling trapezoidal and metric threads with a diameter of up to 80 millimeters; pitch, 6 millimeters; and length, 150 millimeters. Two rollers are used.

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The pneumatic and hydraulic system of the RNSh-2 machine is considerably simpler than other thread-rolling machine tools. The consumption of compressed air during thread production is 16 cubic meters per 1,000 parts.

DESCRIBE LATEST DEVELOPMENTS AT TOOL PLANT -- Moscow, Vechernyaya Moskva, 1 Jun 51

The Moscow Tool Plant was assigned the task of mastering series production of a gear-checking device with a writing attachment during the first 6 months of this year. With the use of this apparatus, gear teeth can be measured to micron precision. [This device is probably similar to the Red Liner Gear Checker produced by the Fellows Gear Shaper Company, Springfield, Vt.]

The first group of these instruments has been assembled and is being tested. The instruments will be sent to various branches of industry in the near future.

A great deal of work was also done at the plant on mastering the series production of another instrument for inspecting the quality of very small gears. This assignment was completed successfully.

In May, the plant was charged with manufacturing a number of special milling cutters for turbine-building plants.

New lathe tools have been put into series production. In the design of this type of cutting tool, the hard-alloy blades are secured without soldering as is usual. Ten cutters, instead of one, are now produced for each tool holder.

Another innovation at this plant is the designing of a special grinding unit mounted on an ordinary machine tool, which will be used for high-speed grinding.

ORGANIZE TRUST FOR REPAIR OF MACHINE TOOLS, PRESS AND FORGING MACHINERY -- Moscow, Stanki 1 instrument, Jun 51

The All-Union Trust for the Repair and Restoration of Metal-Cutting Machine Tools and Press and Forging Machinery (Remmashtrest) has been organized.

This trust has been charged with the production and restoration of idle machine tools and press and forging machinery of all types needing repair, with the exception of machines weighing 10 tons or more, and special-purpose machine tools of enterprises of all ministries and departments.

RELEASE FINAL VOLUME OF MACHINE-BUILDING ENCYCLOPEDIA -- Kiev, Pravda Ukrainy, 14 Jul 51

The State Scientific-Technical Publishing House, Mashgiz, has released the 17th and final volume of the Mashinostroyeniye (Machine-Building) Encyclopedia.

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